[10191/4091]

AND TRADEMARK OFFICE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:

: Examiner: John F. MORTELL

Lee WEI-CHIA et al.

For:

A DEVICE FOR DRIVING ASSISTANCE:

IN PARTICULAR FOR PARKING A

VEHICLE

Filed:

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: Art Unit: 2612

Serial No.:

10/563,664

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(33,865)

APPEAL BRIEF PURSUANT TO 37 C.F.R. § 41.37

SIR:

In the above-identified patent application ("the present application"), Appellants filed a Notice Of Appeal on February 4, 2010, from the Final Office Action issued by the U.S. Patent and Trademark Office on August 4, 2009, (the two-month appeal brief due date for which has been extended by one month to May 4, 2010 by the accompanying Transmittal and Petition to Extend).

In the Final Office Action, claims 10 to 30 were finally rejected. A Response After A Final Office Action was mailed on October 14, 2009, and an Advisory Action was mailed on November 3, 2009.

It is understood for purposes of the appeal that any Amendments to date have already been entered by the Examiner, and that the Response After A Final Office Action of 05/10/2010 MBLANCO 00000010 110600 10563664 October 14, 2009 did not include any Amendments. 540.00 DA 01 FC:1402

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As to the length of the "concise explanation" of the subject matter defined in each of the claims involved in the appeal (see 41.37), the "concise explanation" language is like the "concise explanation" requirement of former Rule 37 C.F.R. § 1.192. Accordingly, the length of the concise explanation provided is acceptable, since it would have been acceptable under 37 C.F.R. § 1.192 and since it specifically defines the subject matter of the independent claims involved and in the appeal. In the filing of many appeal briefs under the old rule for the present Assignee, the length of the "concise explanation" has always been ultimately accepted by the Patent Office.

It is therefore respectfully submitted that this Appeal Brief complies with 37 C.F.R. § 41.37. Although no longer required by the rules, this Brief is submitted in triplicate as a courtesy to the Appeals Board.

It is respectfully submitted that the final rejections of claims 10 to 30 should be reversed for the reasons explained below.

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1. REAL PARTY IN INTEREST

The real party in interest in the present appeal is Robert Bosch GmbH ("Robert Bosch") of Stuttgart in the Federal Republic of Germany. Robert Bosch is the assignee of the entire right, title and interest in the present application.

2. RELATED APPEALS AND INTERFERENCES

There are no interferences or other appeals related to the present application, which "will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal".

3. STATUS OF CLAIMS

CLAIMS 1 TO 9 ARE CANCELED.

- A. Claims 10 to 13, 15, 16, 19, 20, and 28 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application No. 2003/0058337 ("Tanaka").
- B. Claims 14, 21, 23, 24, and 27 are rejected under 35 U.S.C. 103(a) as unpatentable over the Tanaka reference in view of U.S. Patent No. 6,919,917 ("Janssen").
- C. Claim 17 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the Tanaka reference in view of U.S. Patent no. 6,226,592 ("Luckscheiter").
- D. Claim 18 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the Tanaka reference in view of U.S. Publication No. 2003/0045973("Okamoto").
- E. Claims 22 and 25 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Tanaka reference in view of the Janssen reference and further in view of the Luckscheiter reference.
- F. Claims 29 and 30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the Tanaka reference in view of the Janssen reference, further in view of the Luckscheiter reference and in further view of the Okamoto reference.

Appellant therefore appeals from the final rejections of pending claims 10 to 30. A copy of all of the pending and appealed claims 10 to 30 is attached hereto in the Claims Appendix.

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4. STATUS OF AMENDMENTS

In response to the Final Office Action mailed on August 4, 2009, Appellants filed a Response After A Final Office Action, which was mailed on October 14, 2009. It is understood for purposes of the appeal that any Amendments to date have already been entered by the Examiner, and that the Response After A Final Office Action of October 14, 2009 did not include any Amendments.

5. SUMMARY OF CLAIMED SUBJECT MATTER

The concise explanation of the summary of the claimed subject matter is as follows, as described in the context of the present application.

As to claim 10, it is to a device for driving assistance for parallel parking a vehicle, including an output unit for outputting parallel parking driving instructions to a driver. As to claim 28, it is to a driving aid device for parking a vehicle, including an output unit for outputting driving instructions to a driver. Figure 1 shows a Park Pilot 1 (in a vehicle) which has distance sensors 2 which are mounted on the vehicle's front and rear end, and on the vehicle's side panels, and which measure the distance of the vehicle to obstacles in its surroundings. (See Specification, pg. 5, lines 7 to 11 and Fig. 1). Distance information determined by distance sensors 2 is processed in a computer unit 4, which takes into account vehicle data stored in a memory 5. The vehicle data indicates the position relationship of distance sensors 2 with respect to the vehicle exterior contour. As a function of the measured distance values, the vehicle's distance to obstacles in the vehicle's surroundings is determined by taking into account the vehicle data. If a predefined distance falls short, an acoustic alert via a speaker 6 and/or a visual alert via a display 7 is/are output to the driver. (See Specification, pg. 5, lines 18 to 28 and Fig. 1). Park Pilot 1 determines trajectories for parking as a function of the surroundings data determined via distance sensors 2, starting from a current vehicle position to a park position. (See Specification, pg. 6, lines 1 to 5 and Fig. 1).

As to claim 10, it also includes the feature in which the parallel parking driving instructions provide a driver with a driving zone situated between two trajectories which are calculated so that the vehicle can be moved within the driving zone. As to claim 28, it also includes the feature in which the driving instructions indicate to the driver a driving range

between two trajectories which designate two different determined routes, the routes being determined so that the vehicle is moveable to park it within the driving range.

Figure 1 shows a Park Pilot 1 which is installed in a vehicle. Park Pilot 1 has distance sensors 2 which are mounted on the vehicle front end and the vehicle rear end, as well as on the vehicle's side panels, and which measure the distance of the vehicle to obstacles in the vehicle's surroundings. (See Specification, pg. 5, lines 7 to 11 and Fig. 1). Distance information determined by distance sensors 2 is processed in a computer unit 4. Computer unit 4 takes into account vehicle data stored in a memory 5. Among other things, the vehicle data indicates the position relationship of distance sensors 2 with respect to the vehicle exterior contour. As a function of the measured distance values, the vehicle's distance to obstacles in the vehicle's surroundings is determined by taking the vehicle data into account. If a predefined distance falls short, an acoustic alert via a speaker 6 and/or a visual alert via a display 7 is/are output to the driver. (See Specification, pg. 5, lines 18 to 28 and Fig. 1). Park Pilot 1 is designed for the purpose of calculating trajectories for parking as a function of the surroundings data determined via distance sensors 2, starting from a current vehicle position to a park position. (See Specification, pg. 6, lines 1 to 5 and Fig. 1).

The current vehicle position, the position of obstacles, the vehicle dimensions – also the protrusion of the rear end, for example, when the steering wheel is turned – and the current steering angle, as well as the maximum steering angle, are taken into account and trajectories of the vehicle in which no collision occurs are determined in this context. To compensate for measuring uncertainty and an uncertainty in driving the vehicle, a minimum distance to the obstacles is preferably maintained which is taken into account in the calculation. (See Specification, pg. 6, lines 5 to 14 and Fig. 1). Figure 2 shows a parking situation of a motor vehicle 20 including trajectories calculated according to an example embodiment of the present invention for piloting the vehicle into the parking space. (See Specification, pg. 7, lines 1 to 5 and Fig. 2). Figure 2 shows a first extreme trajectory 27 and a second extreme trajectory 28. One trajectory should indicate the vehicle's travel path, which is described in the present embodiment by the path along which the center of the vehicle's rear axle is guided during a move along the trajectory. (See Specification, pg. 7, lines 27 to 31 and Fig. 2).

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In summary, the presently claimed subject matter is to a device for driving assistance for parallel parking a vehicle, including an output unit for outputting parallel parking driving instructions to a driver; wherein the parallel parking driving instructions provide a driver with a driving zone situated between two trajectories which are calculated in such a way that the vehicle can be moved within the driving zone. (See claim 10).

In summary, the presently claimed subject matter is to a driving aid device for parking a vehicle, including an output unit for outputting driving instructions to a driver, wherein the driving instructions indicate to the driver a driving range between two trajectories which designate two different determined routes, the routes being determined so that the vehicle is moveable to park it within the driving range. (See claim 28).

Finally, the appealed claims include no means-plus-function language and no step-plus-function claims, so that 37 C.F.R. 41.37(v) is satisfied as to its specific requirements for such claims, since none are present here. Also, the present application does not contain any step-plus-function claims because the method claims in the present application are not "step plus function" claims because they do not recite "a step for", as required by the Federal Circuit and as stated in Section 2181 of the MPEP.

6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- A. Whether claims 10 to 13, 15, 16, 19, 20, and 28 under 35 U.S.C. § 102(e) are anticipated by U.S. Patent Application No. 2003/0058337 ("Tanaka").
- B. Whether claims 14, 21, 23, 24, and 27 under 35 U.S.C. 103(a) are unpatentable over the Tanaka reference in view of U.S. Patent No. 6,919,917 ("Janssen").
- C. Whether claim 17 under 35 U.S.C. § 103(a) is unpatentable over the Tanaka reference in view of U.S. Patent no. 6,226,592 ("Luckscheiter").
- D. Whether claim 18 under 35 U.S.C. § 103(a) is unpatentable over the Tanaka reference in view of U.S. Publication No. 2003/0045973("Okamoto").

- E. Whether claims 22 and 25 under 35 U.S.C. § 103(a) are unpatentable over the Tanaka reference in view of the Janssen reference and further in view of the Luckscheiter reference.
- F. Whether claims 29 and 30 under 35 U.S.C. § 103(a) are unpatentable over the Tanaka reference in view of the Janssen reference, further in view of the Luckscheiter reference and in further view of the Okamoto reference.

7. ARGUMENT

A. THE ANTICIPATION REJECTIONS OF CLAIMS 10 TO 13, 15, 16, 19, 20, AND 28

Claims 10 to 13, 15, 16, 19, 20, and 28 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application No. 2003/0058337 A1 ("Tanaka").

To reject a claim under 35 U.S.C. § 102, the Office must demonstrate that each and every claim feature is identically described or contained in a single prior art reference. (See Scripps Clinic & Research Foundation v. Genentech, Inc., 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991)). Still further, not only must each of the claim features be identically described, an anticipatory reference must also enable a person having ordinary skill in the art to practice the claimed invention, namely the claimed subject matter of the claims, as discussed herein. (See Akzo, N.V. v. U.S.I.T.C., 1 U.S.P.Q.2d 1241, 1245 (Fed. Cir. 1986)).

As further regards the anticipation rejections, to the extent that the Final Office Action may be relying on the inherency doctrine, it is respectfully submitted that to rely on inherency, the Office must provide a "basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristics *necessarily* flows from the teachings of the applied art." (See M.P.E.P. § 2112; emphasis in original; and see Ex parte Levy, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Int'f. 1990)). Thus, the M.P.E.P. and the case law make clear that simply because a certain result or characteristic may occur in the prior art does not establish the inherency of that result or characteristic. Accordingly, it is respectfully submitted that any anticipation rejection premised on the inherency doctrine is not sustainable absent the foregoing conditions.

CLAIM 10

Independent claim 10 is to a device for providing driving assistance in which the parallel parking driving instructions provide a driver with a <u>driving zone</u> situated between

two <u>trajectories</u> which are calculated in such a way that the vehicle can be moved within the driving zone. The specification of the present application clearly distinguishes between pilot lines and a driving zone. For example, it specifically discloses that a "driver attempts to follow these pilot lines as accurately as possible." (Specification, page 1, lines 23 to 24.) Thus, for pilot lines, a driver is instructed to follow a particular trajectory. Following such a particular trajectory may lead to detrimental results, as explained in the specification.

In contrast, in a <u>driving zone</u>, instead of a particular trajectory which the driver is supposed to follow, a driver may "<u>arbitrarily drive and steer and thus select any trajectory between the two delimiting trajectories without colliding with an obstacle</u>." (<u>Id.</u> page 2, lines 13 to 16, emphasis added). The specification further discloses that to "remain in a safe zone, however, the <u>driver may not leave the zone delimited by the trajectories</u>." (<u>Id.</u> at lines 17 to 19 (emphasis added)). Furthermore, the meaning of the term trajectory is clearly defined in the Specification (at pg. 7, line 28 to pg. 8, line 10) as indicating the vehicle's travel path -- which is described by the path along which the center of the vehicle's rear axle is guided during a move along the trajectory. In addition, a travel path of the vehicle may also be defined via other, fixed points of the vehicle, e.g., at the corners of the vehicle contour or at the position of the wheels. Therefore the subject matter of claim 10 includes providing a driver with a <u>driving zone</u> situated between two <u>paths along which a fixed point of the vehicle is guided during a move</u> which are calculated in such a way that the vehicle can be moved within the driving zone.

In Fig. 2 of the present application, for example, the driving zone is defined by the two trajectories (27, 28) along which the center of the rear axle (40) of vehicle (20) can safely travel. Dashed lines (44, 45) delimit an area occupied by the vehicle during travel, in which an area lateral to vehicle (20) is not exceeded during travel along both trajectories. These lines clearly do not constitute **trajectories** as defined in the presently claimed subject matter, since they do not describe two paths along which a fixed point of the vehicle can move safely for parking. This is clear because any single fixed point of the vehicle that could safely move along the path described by dashed line (44) could not also move safely along the path described by dashed line (45) because the two lines (44, 45) are too far apart from each other in comparison to the distance between the two acceptable trajectories (27, 28).

The Tanaka reference does not identically disclose (nor even suggest) the aboveidentified claim features, as provided for in the context of the claimed subject matter. Any review of the cited sections relied upon by the Office Actions to date and the Advisory

Action (or even the entire Tanaka reference) make plain that there is not even a discussion of a driving zone delimited by trajectories. Instead, the Tanaka reference merely refers to R as "an anticipated course of the one's own vehicle" and not a driving zone situated between two paths along which a fixed point of the vehicle is guided during a move. (Tanaka, page 4, paragraph [0054]). Also, parking path S is only referred to by Tanaka as a single "parking path." (Tanaka, page 4, paragraph [0057]). Thus, even if the Tanaka reference did refer to a driver's anticipated course or parking path, nothing in the Tanaka reference identically discloses (nor even suggests) a driving zone delimited by two paths along which a fixed point of the vehicle can be guided during a move and outside of which the vehicle may collide, as provided for in the context of the presently claimed subject matter.

In particular, Tanaka refers to a system that calculates a singular parking path S so as to avoid a collision with an obstacle, but this does not support the Office's conclusion that "a parking path defines a zone situated between two boundaries" (Final Office Action of August 4, 2009, page 18, emphasis added) ("As depicted in Fig. 1, the parking path S includes left and right vehicle trajectory boundaries. The boundaries of parking path S define a zone of vehicle travel" (Advisory Action of November 3, 2009, at continuation of 11, emphasis added)). As explained, there is a difference between a trajectory as defined in the presently claimed subject matter (a path along which a fixed point of a vehicle can safely travel for parking) and a boundary as is depicted as to parking path S in Fig. 1 of Tanaka) that merely delimits an area occupied by the vehicle during travel, in which that area is not exceeded during travel along a parking path. These "trajectory boundaries" (as they are referred to in the Advisory Action) are not referred to anywhere in the Tanaka reference as constituting two paths (along which a fixed point of the vehicle is guided during a move) and are calculated so that the vehicle can be moved within the driving zone. Furthermore, these "trajectory boundaries" clearly do not constitute trajectories as defined in the presently claimed subject matter, since they do not describe two paths along which a fixed point of the vehicle can move safely for parking. This is clear because any single fixed point of the vehicle that could safely move along the path described by the left "trajectory boundary" could not also move safely along the path described by the right "trajectory boundary." This is because the two "trajectory boundaries" are too far apart from each other as explained above regarding dashed lines (44, 45) (of the present application) -- which delimit an area occupied by the vehicle during travel, where that area lateral to vehicle (20) is not exceeded during travel along both

trajectories. It is respectfully submitted that the "trajectory boundaries" of the parking path S in Fig. 1 of Tanaka therefore cannot be <u>trajectories</u> as defined in the present application.

It is respectfully submitted that the Office Actions to date essentially ignore the proper meaning of the term "trajectories" which is to be understood in view of the specification. (See In re Weiss, 26 U.S.P.Q.2d 1885, 1887 (Fed. Cir. 1993) (when interpreting a claim term or phrase, one must "look to the specification for the meaning ascribed to that term"; Board reversed) (unpublished decision); In re Okuzawa, 190 U.S.P.Q. 464, 466 (C.C.P.A. 1976) ("claims are not to be read in a vacuum, and limitations therein are to be interpreted in light of the specification in giving them their broadest reasonable interpretation"; Board reversed; emphasis in original) (citing In re Royka, 180 U.S.P.Q. 580, 582-83 (C.C.P.A. 1974) (claims are "not to be read in a vacuum and while it is true that they are to be given the broadest reasonable interpretation during prosecution, their terms still have to be given the meaning called for by the specification of which they form a part"; Board reversed; emphasis in original); and In re Rohrbacher, 128 U.S.P.Q. 117, 119 (C.C.P.A. 1960) (an "applicant is his own lexicographer and words used in his claims are to be interpreted in the sense in which they are used in the specification"; Board reversed)).

It is respectfully submitted that this is exactly the case here since contrary to the foregoing law, the Final Office Action simply reflects its own unreasonable reading of the term "trajectories" without making a distinction with the term "boundary," as used in the Office Actions to date to describe the limits of the area occupied by the vehicle during travel along a parking path.

As explained above and as is disclosed in the specification, a driving zone provides a driver more flexibility and safety. For example, a zone allows a driver to "arbitrarily drive and steer and thus select any trajectory between the two delimiting trajectories." (Specification, lines 17 to 19, emphasis added). In stark contrast, in Tanaka, one must follow along a parking path S. A driving zone, as provided in the context of the claimed subject matter, is not identically disclosed (nor even suggested) by the Tanaka reference.

Accordingly, claim 10 is allowable, as are its dependent claims 11 to 13, 15, 16, 19, and 20.

CLAIM 28

Independent claim 28 is to a driving aid device for parking a vehicle in which the driving instructions indicate to the driver <u>a driving range between two trajectories which</u> designate two different determined routes.

The Tanaka reference does not identically disclose (nor suggest) the above identified claim features. In particular, nothing in the Tanaka reference identically describes a <u>driving</u> <u>range</u>, as provided for in the context of the presently claimed subject matter, since at best, the Tanaka reference may merely refer to a <u>parking path</u> of the driver – and not a driving range.

Furthermore, it is respectfully submitted that the Tanaka reference does not identically disclose (nor suggest) the claim feature of *two different determined routes*, since any review of the Tanaka reference makes plain that *two different determined routes* are not even discussed. In Tanaka, path S (as to every time it is used with respect to Figures 1 to 3) is referred to by Tanaka as a single parking path -- and not two different determined routes, as asserted by the Office Actions to date and the Advisory Action. For example, as to Fig. 4, Tanaka states that "the parking path S from the current position of one's own vehicle to the parking target point is calculated." (Tanaka, page 4, paragraph [0058]). Notably, as explained above, the "trajectory boundaries" of Tanaka clearly do not describe two separate paths along which a vehicle can move safely for parking, but instead concern the limits of an area occupied by the vehicle during travel along a parking path S in Fig. 1 of the Tanaka reference. Accordingly, Tanaka does not identically disclose (nor suggest) two different determined routes, as provided for in the context of claim 28.

As further regards the anticipation rejections, as explained as to claim 10, it is respectfully submitted that the Office may not ignore the reasonable interpretation of the terms "driving range" and "two different determined routes," as provided for in the context of the claimed subject matter -- and as would be understood by a person having ordinary skill in the art based on the specification. (See In re Weiss, 26 U.S.P.Q.2d 1885, 1887 (Fed. Cir. 1993) (when interpreting a claim term or phrase, one must "look to the specification for the meaning ascribed to that term"; Board reversed) (unpublished decision).

For at least the reasons above, claim 28 is allowable. It is therefore respectfully requested that the anticipation rejection be withdrawn.

B. THE OBVIOUSNESS REJECTIONS OF CLAIMS 14, 21, 23, 24, AND 27

Claims 14, 21, 23, 24, and 27 were rejected under 35 U.S.C. 103(a) as unpatentable over the combination of the Tanaka reference in view of U.S. Patent No. 6,919,917 (the "Janssen" reference).

To reject a claim under 35 U.S.C. § 103(a), the Office bears the initial burden of presenting a *prima facie* case of obviousness. *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). To establish *prima facie* obviousness, three criteria must be satisfied. First, there must be some suggestion or motivation to modify or combine reference teachings. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). This teaching or suggestion to make the claimed combination must be found in the prior art and not based on the application disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).

Also, as clearly indicated by the Supreme Court in KSR, it is "important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements" in the manner claimed. See KSR Int'l Co. v. Teleflex, Inc., 127 S. Ct. 1727 (2007). In this regard, the Supreme Court further noted that "rejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." Id., at 1396. Second, there must be a reasonable expectation of success. In re Merck & Co., Inc., 800 F.2d 1091, 231 U.S.P.Q. 375 (Fed. Cir. 1986). Third, the prior art reference(s) must teach or suggest all of the claim features. In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974).

CLAIMS 14, 21, 23, 24, AND 27

Claims 14, 21, 23, 24, 26, and 27 ultimately depend from claim 10, and they are therefore allowable for essentially the same reasons as claim 10, since the secondary reference does not cure -- and is not asserted to cure -- the critical deficiencies of the primary reference as to the present application.

C. THE OBVIOUSNESS REJECTION OF CLAIM 17

Claim 17 was rejected under 35 U.S.C. § 103(a) as being unpatentable over the Tanaka reference in view of U.S. Patent no. 6,226,592 B1 (the "Luckscheiter" reference).

CLAIM 17

Claim 17 depends from claim 10, and it is therefore allowable for essentially the same reasons as claim 10, since the secondary reference does not cure -- and is not asserted to cure -- the critical deficiencies of the primary reference as to the present application.

D. THE OBVIOUSNESS REJECTION OF CLAIM 18

Claim 18 was rejected und 35 U.S.C. § 103(a) as being unpatentable over the Tanaka reference in view of U.S. Publication No. 2003/0045973 A1 (the "Okamoto" reference).

CLAIM 18

Claim 18 depends from claim 10, and it is therefore allowable for essentially the same reasons as claim 10, since the secondary reference does not cure -- and is not asserted to cure -- the critical deficiencies of the primary reference as to the present application.

E. THE OBVIOUSNESS REJECTION OF CLAIMS 22 AND 25

Claims 22 and 25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the Tanaka reference in view of the Janssen reference and further in view of the Luckscheiter reference.

CLAIMS 22 AND 25

Claims 22 and 25 ultimately depend from claim 10, and they are therefore allowable for essentially the same reasons as claim 10, as presented, since the secondary references do not cure -- and are not asserted to cure -- the critical deficiencies of the primary reference as to the present application.

F. THE OBVIOUSNESS REJECTION OF CLAIMS 29 AND 30

Claims 29 and 30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the Tanaka reference in view of the Janssen reference, further in view of the Luckscheiter reference and in further view of the Okamoto reference.

CLAIMS 29 AND 30

Claims 29 and 30 ultimately depend from claims 28 and 10 accordingly, and they are therefore allowable for essentially the same reasons as their independent claims, since the secondary references do not cure -- and are not asserted to cure -- the critical deficiencies of the primary reference as to the present application.

As further regards all of the obviousness rejections, it was respectfully requested that the Examiner provide an affidavit and/or that the Examiner provide published information concerning these assertions. This is because the § 103 rejections were apparently being based on assertions that draw on facts within the personal knowledge of the Examiner, since no support was provided for these otherwise conclusory and unsupported assertions. (See also MPEP § 2144.03). This has not been done.

As further regards each of the obviousness rejections, it is respectfully submitted that the cases of <u>In re Fine</u>, <u>supra</u>, and <u>In re Jones</u>, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992), make plain that the Office's generalized assertions that it would have been obvious to modify or combine the references do not properly support a § 103 rejection. It is respectfully submitted that those cases make plain that the Answer reflects a subjective "obvious to try" standard, and therefore does not reflect the proper evidence to support an obviousness rejection based on the references relied upon. In particular, the Court in the case of <u>In re Fine</u> stated that:

The PTO has the burden under section 103 to establish a *prima* facie case of obviousness. It can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. This it has not done. . . .

Instead, the Examiner relies on hindsight in reaching his obviousness determination.... One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.

<u>In re Fine</u>, 5 U.S.P.Q.2d at 1598 to 1600 (citations omitted; italics in original; emphasis added). Likewise, the Court in the case of <u>In re Jones</u> stated that:

Before the PTO may combine the disclosures of two or more prior art references in order to establish *prima facie* obviousness, there must be some suggestion for doing so, found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. . . .

Conspicuously missing from this record is any evidence, other than the PTO's speculation (if it be called evidence) that one of ordinary skill... would have been motivated to make the modifications... necessary to arrive at the claimed [invention].

In re Jones, 21 U.S.P.Q.2d at 1943, 1944 (citations omitted; italics in original).

That is exactly the case here since it is believed and respectfully submitted that the Office Actions to date offer no evidence whatsoever, but only conclusory hindsight, reconstruction and speculation, which these cases have indicated does not constitute evidence that will support a proper obviousness finding. Unsupported assertions are not evidence as to why a person having ordinary skill in the art would be motivated to modify or combine references to provide the claimed subject matter of the claims to address the problems met thereby. Accordingly, the Office must provide proper evidence of a motivation for modifying or combining the references to provide the claimed subject matter.

Also, the Federal Circuit in the case of <u>In re Kotzab</u> has made plain that even if a claim concerns a "technologically simple concept" — which is not the case here — there still must be some finding as to the "specific understanding or principle within the knowledge of a skilled artisan" that would motivate a person having <u>no</u> knowledge of the claimed subject matter to "make the combination in the manner claimed," stating that:

In this case, the Examiner and the Board fell into the hindsight trap. The idea of a single sensor controlling multiple valves, as opposed to multiple sensors controlling multiple valves, is a technologically simple concept. With this simple concept in mind, the Patent and Trademark Office found prior art statements that in the abstract appeared to suggest the claimed limitation. But, there was no finding as to the specific understanding or principle within the knowledge of a skilled artisan that would have motivated one with no knowledge of Kotzab's invention to make the combination in the manner claimed. In light of our holding of the absence of a motivation to combine the teachings in Evans, we conclude that the Board did not make out a proper prima facie case of obviousness in rejecting [the] claims . . . under 35 U.S.C. Section 103(a) over Evans.

In re Kotzab, 55 U.S.P.Q.2d 1313, 1318 (Fed. Cir. 2000) (emphasis added). Here again, there have been no such findings to establish that the features discussed above of the rejected claims are met by the reference relied upon. As referred to above, any review of the reference, whether taken alone or combined, makes plain that the reference simply does not describe the features discussed above of the rejected claims.

Thus, the proper evidence of obviousness must show why there is a suggestion as to the reference so as to provide the subject matter of the claimed subject matter and its benefits.

In short, there is no evidence that the reference relied upon, whether taken alone or otherwise, would provide the features of the claims discussed above. It is therefore respectfully submitted that the claims are allowable for these reasons.

As still further regards all of the obviousness rejections of the claims, it is respectfully submitted that a proper prima facie case has not been made in the present case for obviousness, since the Office Actions to date never made any findings, such as, for example, regarding in any way whatsoever what a person having ordinary skill in the art would have been at the time the claimed subject matter of the present application was made. (See In re Rouffet, 47 U.S.P.Q.2d 1453, 1455 (Fed. Cir. 1998) (the "factual predicates underlying" a prima facie "obviousness determination include the scope and content of the prior art, the differences between the prior art and the claimed invention, and the level of ordinary skill in the art")). It is respectfully submitted that the proper test for showing obviousness is what the "combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art", and that the Patent Office must provide particular findings in this regard — the evidence for which does not include "broad conclusory statements standing alone". (See In re Kotzab, 55 U.S.P.Q. 2d 1313, 1317 (Fed. Cir. 2000) (citing In re Dembiczak, 50 U.S.P.Q.2d 1614, 1618 (Fed. Cir. 1999) (obviousness rejections reversed where no findings were made "concerning the identification of the relevant art", the "level of ordinary skill in the art" or "the nature of the problem to be solved"))). It is respectfully submitted that there has been no such showings by the Office Actions to date or by the Advisory Action.

In fact, the present lack of any of the required factual findings forces both Appellants and this Appeals Board to resort to unwarranted speculation to ascertain exactly what facts underly the present obviousness rejections. The law mandates that the allocation of the proof burdens requires that the Patent Office provide the factual basis for rejecting a patent application under 35 U.S.C. § 103. (See In re Piasecki, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984) (citing In re Warner, 379 F.2d 1011, 1016, 154 U.S.P.Q. 173, 177 (C.C.P.A. 1967))). In short, the Examiner bears the initial burden of presenting a proper prima facie unpatentability case — which has not been met in the present case. (See In re Oetiker, 977 F.2d 1443, 1445, 24, U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992)).

Accordingly, all of pending claims 10 to 30 are allowable.

CONCLUSION

In view of the above, it is respectfully requested that the rejections of the finally rejected claims 10 to 30 be reversed, and that these claims be allowed as presented.

Respectfully submitted,

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Dated: 5 /4/80/0

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CLAIMS APPENDIX

1-9. (Canceled).

- 10. A device for driving assistance for parallel parking a vehicle, comprising:
 an output unit for outputting parallel parking driving instructions to a driver;
 wherein the parallel parking driving instructions provide a driver with a driving zone situated between two trajectories which are calculated in such a way that the vehicle can be moved within the driving zone.
- 11. The device for driving assistance as recited in claim 10, wherein the output unit includes a display configured to display surroundings of the vehicle and to display the driving zone with respect to the displayed surroundings of the vehicle.
- 12. The device for driving assistance as recited in claim 11, further comprising:
 a detection unit configured to detect a set steering angle and to determine an
 anticipated travel path at an unchanged steering angle, the anticipated travel path being
 displayed at least partially with respect to the surroundings of the vehicle.
- 13. The device for driving assistance as recited in claim 10, wherein the trajectories delimiting the driving zone require at least one full angle of a steering wheel for following the appropriate trajectory.
- 14. The device for driving assistance as recited in claim 10, further comprising:
 a measuring device configured to measure a distance of the vehicle to obstacles in the surroundings of the vehicle.
- 15. The device for driving assistance as recited in claim 10, further comprising: a computer unit configured to determine a parking space suitable for the vehicle.

- 16. The device for driving assistance as recited in claim 10, wherein an indication for changing a turning direction of a steering wheel is output.
- 17. The device for driving assistance as recited in claim 10, further comprising:
 a powered unit configured to impact a steering wheel of the vehicle for outputting a
 haptic effect via the steering wheel when leaving the driving zone.
- 18. The device for driving assistance as recited in claim 10, further comprising: a speaker to output an acoustic alert signal when leaving the driving zone.
- 19. The device for driving assistance as recited in claim 10, wherein the output unit includes a display configured to display surroundings of the vehicle and to display the driving zone with respect to the displayed surroundings of the vehicle, and wherein the trajectories delimiting the driving zone require at least one full angle of a steering wheel for following the appropriate trajectory.
- 20. The device for driving assistance as recited in claim 19, further comprising:
 a detection unit configured to detect a set steering angle and to determine an
 anticipated travel path at an unchanged steering angle, the anticipated travel path being
 displayed at least partially with respect to the surroundings of the vehicle.
- 21. The device for driving assistance as recited in claim 10, further comprising:
 a measuring device configured to measure a distance of the vehicle to obstacles in the surroundings of the vehicle; and
 - a computer unit configured to determine a parking space suitable for the vehicle; wherein an indication for changing a turning direction of a steering wheel is output.
- 22. The device for driving assistance as recited in claim 21, further comprising:
 a powered unit configured to impact a steering wheel of the vehicle for outputting a
 haptic effect via the steering wheel when leaving the driving zone.

Claims Appendix 2

- 23. The device for driving assistance as recited in claim 21, further comprising: a speaker to output an acoustic alert signal when leaving the driving zone.
- 24. The device for driving assistance as recited in claim 19, further comprising:
 a measuring device configured to measure a distance of the vehicle to obstacles in the surroundings of the vehicle; and
 a computer unit configured to determine a parking space suitable for the vehicle;

wherein an indication for changing a turning direction of a steering wheel is output.

- 25. The device for driving assistance as recited in claim 24, further comprising: a powered unit configured to impact a steering wheel of the vehicle for outputting a haptic effect via the steering wheel when leaving the driving zone.
- 26. The device for driving assistance as recited in claim 24, further comprising: a speaker to output an acoustic alert signal when leaving the driving zone.
- 27. The device for driving assistance as recited in claim 24, further comprising: a detection unit configured to detect a set steering angle and to determine an anticipated travel path at an unchanged steering angle, the anticipated travel path being displayed at least partially with respect to the surroundings of the vehicle.
- 28. A driving aid device for parking a vehicle, comprising:

an output unit for outputting driving instructions to a driver, wherein the driving instructions indicate to the driver a driving range between two trajectories which designate two different determined routes, the routes being determined so that the vehicle is moveable to park it within the driving range.

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29. The driving aid device as recited in claim 28, further comprising:

a detection unit configured to detect a set steering angle and to determine an anticipated travel path at an unchanged steering angle, the anticipated travel path being displayed at least partially with respect to the surroundings of the vehicle;

a measuring device configured to measure a distance of the vehicle to obstacles in the surroundings of the vehicle;

a computer unit configured to determine a parking space suitable for the vehicle; a powered unit configured to impact a steering wheel of the vehicle for outputting a haptic effect via the steering wheel when leaving the driving zone; and

a speaker to output an acoustic alert signal when leaving the driving zone;

wherein the output unit includes a display configured to display surroundings of the vehicle and to display the driving zone with respect to the displayed surroundings of the vehicle.

wherein the trajectories delimiting the driving zone require at least one full angle of a steering wheel for following the appropriate trajectory, and

wherein an indication for changing a turning direction of a steering wheel is output.

30. The device for driving assistance as recited in claim 10, further comprising:

a detection unit configured to detect a set steering angle and to determine an anticipated travel path at an unchanged steering angle, the anticipated travel path being displayed at least partially with respect to the surroundings of the vehicle;

a measuring device configured to measure a distance of the vehicle to obstacles in the surroundings of the vehicle;

a computer unit configured to determine a parking space suitable for the vehicle;

a powered unit configured to impact a steering wheel of the vehicle for outputting a haptic effect via the steering wheel when leaving the driving zone; and

a speaker to output an acoustic alert signal when leaving the driving zone;

wherein the output unit includes a display configured to display surroundings of the vehicle and to display the driving zone with respect to the displayed surroundings of the vehicle,

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wherein the trajectories delimiting the driving zone require at least one full angle of a steering wheel for following the appropriate trajectory, and

wherein an indication for changing a turning direction of a steering wheel is output.

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EVIDENCE APPENDIX

Appellants have not submitted any evidence pursuant to 37 CFR Sections 1.130, 1.131 or 1.132, and do not rely upon evidence entered by the Examiner.

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U.S. Pat. App. Ser. No. 10/563,664 Attorney Docket No. 10191/4091 Appeal Brief

RELATED PROCEEDINGS INDEX

There are no interferences or other appeals related to the present application.